

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES**

In re patent application of:) Attorney Docket No.: F-661
Steven M. Kaye, et al) Group Art Unit: 2179
Serial No: 10/622,332) Examiner: Steven B. Theriault
Filed: July 18, 2003) Date: November 14, 2007
Confirmation No.: 4827) Customer No.: 00919
Title: ASSISTIVE TECHNOLOGY FOR DISABLED PEOPLE AND OTHERS
UTILIZING A REMOTE SERVICE BUREAU

APPELLANT'S BRIEF

Sir:

This brief is in furtherance of the Notice of Appeal filed in this case on September 17, 2007.

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I. REAL PARTY IN INTEREST

Pitney Bowes Inc. is the real party in interest.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals and interferences.

III. STATUS OF CLAIMS

- A. Claims 1 – 12 and 14 -20 are in the application.
- B. Claims 1 – 12 and 14 -20 are rejected.
- C. Claim 13 has been cancelled by a March 20, 2007 Amendment.
- D. Claims 1 – 12 and 14 -20 are on appeal.

IV. STATUS OF AMENDMENTS

An amendment subsequent to the April 17, 2007, Final Rejection was filed on June 7, 2007. This amendment was not entered.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Appellant's claimed invention is a PC-based module capable of providing two-way conferencing with video capability, including remote control capability between the equipment user and a central service bureau. This PC module may be part of a more comprehensive assistive device such as a Universal Access photocopier or Universal Access mailing machine or it may stand alone. Additionally, the present invention can be retrofitted to specific machines so that hardware devices at the user's location can be controlled locally by the user or remotely through the videoconferencing PC via standard communication protocols such as RS-232 or TCP/IP. Assistive hardware devices could be used to raise and lower a work surface, to adjust a feeder angle, to adjust a separator knob, to adjust a side guide, et cetera.

A person obtains live assistance in using a paper processing machine. The assistance is provided by a service bureau that is remote from the person. The service bureau receives a call for help, and checks a user profile of the person. The service bureau also checks an equipment profile of the person. Then the service bureau provides interactive assistance to the person, based at least partly upon the user profile and the equipment profile. The user profile will indicate any disabilities that the user may have, such as visual impairment, tremor in the hands, or cognitive problem. An empty user profile signifies that the person at the user end has no relevant disabilities, but even for such a person, the user profile may contain other types of information such as the level of support purchased by that person from the service bureau. In contrast, the equipment profile will typically indicate what types and models of paper processing equipment the person has available at the user end.

Claim 1 is one of the two independent claims in this patent application.

Claim 1 is a method for helping a person to use or prepare to use a paper processing machine. Claim 1 includes the following steps:

receiving a call for help from the person to a remote service bureau; (Fig. 1, 110)

checking a user profile of the person; (Fig. 1,120)

checking an equipment profile of the person; (Fig. 1, 130) and

receiving a video uplink from the person's location; (Fig. 1, 150)

providing interactive assistance from the remote service bureau to the person, in response to the call, and seeing a visual image from the person's location, (Fig. 1, 170)

wherein the interactive assistance is based at least partly upon the user profile, the visual image and the equipment profile.

The invention claimed in claim 1 is explained in greater detail in Fig.1 and paragraph 021 on pages 5 and 6 of Appellants' Patent Application.

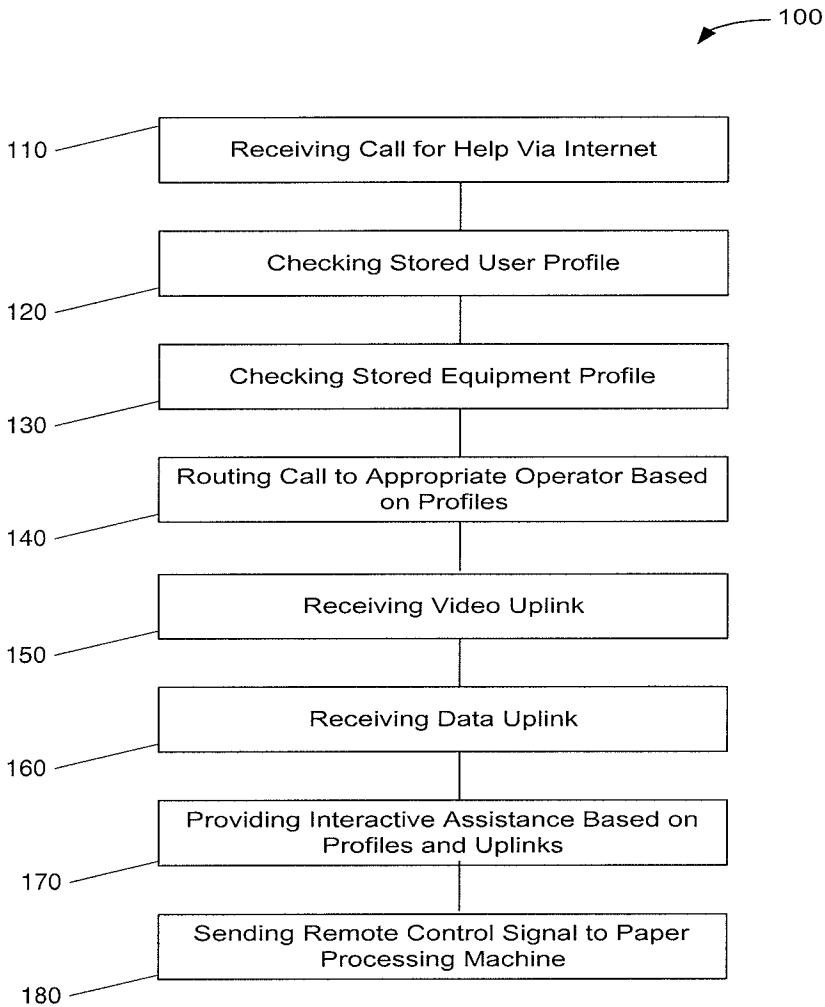


FIG. 1

As seen in the method 100 depicted in the flow chart of FIG. 1, a preferred embodiment of the present invention entails the remote service bureau receiving 110 a call for help via the Internet. The service bureau then checks 120 the stored user profile to find out about the user's disabilities or lack thereof, and to possibly find out the level of service purchased by the user. The service bureau will also check 130 the stored equipment profile of the person at the user end, to see what types and models of paper processing equipment the person has available, such as photocopiers, paper sorters,

mailing machines, et cetera. Based upon these two profiles, the call will be routed **140** to an appropriate operator at the remote service bureau. It should be understood that the service bureau need not be located in a single building, and it is possible that the operators could even be working from their individual homes. The operator of the remote service bureau will receive **150** a video uplink from the user terminal, and also a data uplink **160** that allows the operator to monitor status of the paper processing machine in question, in addition to having a live visual feed from the user's location. The video link will allow the operator to see the machine, or see a document displayed by the person at the user end. Based at least partly upon these two profiles stored at the service bureau, and upon these two uplinks to the service bureau, the service bureau will then provide **170** interactive assistance to the person at the user end. In this preferred embodiment, the service bureau also has the capability to send remote control signal to the paper processing machine, in order to adjust or operate that machine as requested by the person at the user end.

Claim 11 is the second independent claim in this patent application. Claim 11 is a system (200, Fig. 2) for helping a person to use or prepare to use a paper processing machine. Claim 11 claims the following components:

a user terminal (205, Fig. 2) at the person's location; wherein the user terminal is equipped with a video camera (240, Fig. 2) for providing a video image of the person's location;

an operator terminal at a remote service bureau, responsive to a call for help (210, Fig. 2) from the user terminal (205, Fig. 2) and the video image (235, Fig. 2) of the person's location, the operator terminal having capacity to access a user profile (225, Fig. 2) and an equipment profile (230, Fig. 2), the video image (235, Fig. 2) and the operator terminal also having capacity to provide interactive assistance (260, Fig. 2) to the user terminal based at least partly upon the user

profile (225, Fig. 2) the video image (235, Fig. 2) and the equipment profile (230, Fig. 2).

The invention claimed in claim 11 is explained in greater detail in Fig.2 and paragraph 022 on pages 6 to paragraph 026 of page 8 of Appellants' Patent Application.

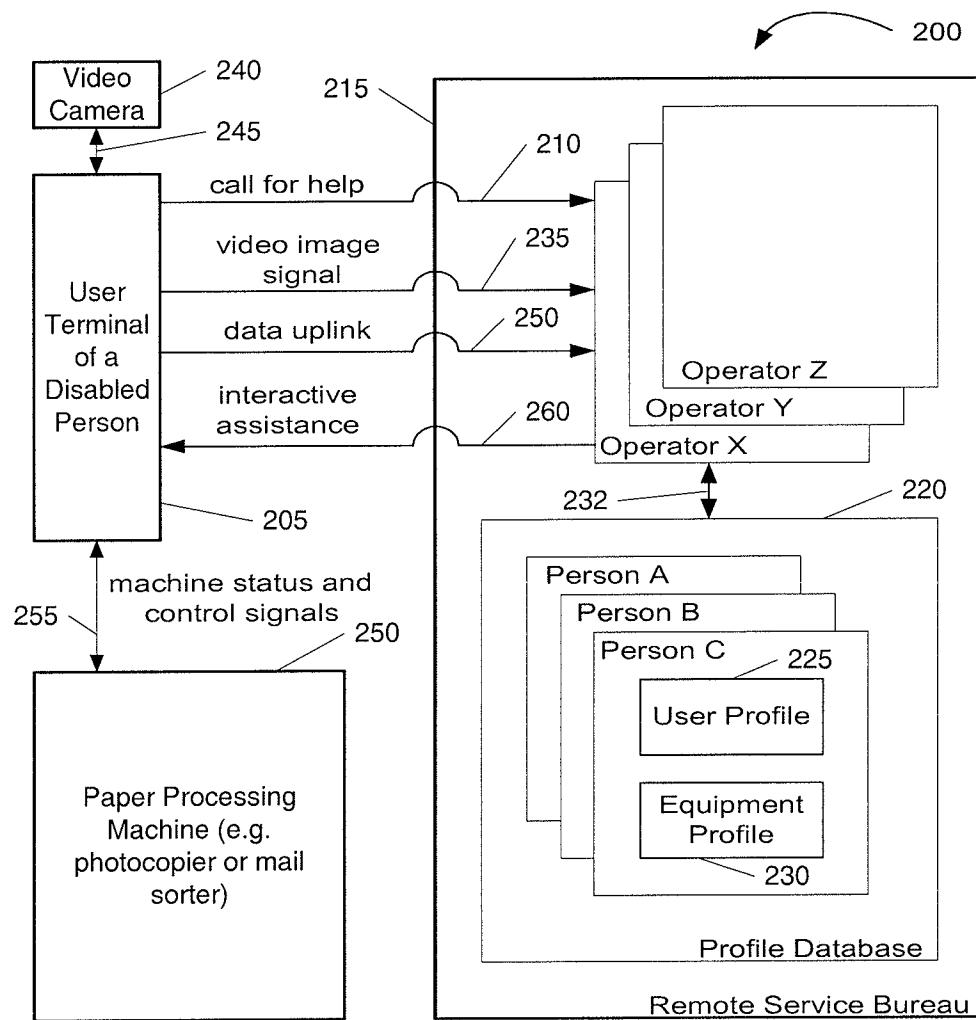


FIG. 2

As seen in FIG. 2, a preferred embodiment of the present invention is illustrated in a block diagram of the system 200. The user terminal of a disabled person 205 sends a call for help 210 to a remote service bureau 215. The remote service bureau has a profile database 220 that has profiles for various people (A, B, C, etc.). The

profile for each person includes a user profile **225** and an equipment profile **230**. Based upon the identity of the disabled person, the service bureau is able to access the appropriate user profile and equipment profile, and thus route the call to an appropriate operator, shown in FIG.2 as Operator X who is forwarded the relevant information in the database **220**, or who has direct access **232** to the database.

The user terminal **205** uploads a video image signal **235** to the operator, the signal having been derived from a video camera **240** that has a connection **245** to the user terminal. Also, the user terminal establishes a data uplink to the operator, having a magnitude indicative of at least one status of a paper processing machine **250** with which the user terminal exchanges signals **255**. Based upon the call for help **210**, the video image signal **235**, the data uplink **250**, the user profile **225**, and the equipment profile **230**, the operator is able to provide interactive assistance **260** to help the disabled person to operate the paper processing machine. This interactive assistance may merely consist of helping the disabled person to prepare to use the machine by filling out a form that is then processed by the machine **250**, or it can consist of instructing the disabled person how to use the machine, or the interactive assistance **260** can include a control signal that is passed by the user terminal **205** to the paper processing machine **250** via the signals **255**, so that the operator can remotely adjust or operate the machine **250**.

The user terminal **205** is shown in somewhat more detail in FIG. 3. The terminal includes at least one port **310** for connection to a video camera. The user terminal further includes an Internet communication port **320** for communicating with a remote service bureau. The user terminal further includes at least one port **330** for interacting with a paper processing machine. All of these three ports **310**, **320**, and **330** are connected to computer software **340** via respective connections **350**, **360**, and **370**. The computer software **340** is implemented by a central processing unit or the like, and this software **340** is for utilizing the ports to obtain interactive assistance from a remote service bureau, as has already been described with respect to FIG. 2. The computer software is embodied in computer-readable media encoded with a data structure for operating the user terminal **205**.

According to these illustrative embodiments of the present invention, the interactive assistance provided to the disabled person at the user end is customized in response to an indication in the user profile **225** of at least one user disability. For example, if the user profile indicates that the person is deaf, then an operator may be selected who can read sign language. If the user profile indicates that the disabled person is mentally disabled, then the interactive assistance may be provided slowly. Although the user profile **225** and the equipment profile **230** have been shown in FIG.2 as part of a database within the remote service bureau, it is within the scope of this invention for at least part of these profiles to be automatically uploaded or updated to the service bureau when the call for help **210** is placed. Also, FIG. 2 does not explicitly show a video downlink, but that can certainly be a part of the interactive assistance; if the user terminal has the architecture of a typical personal computer, then a screen will be included, and that screen could accommodate images sent from Operator X to the disabled person.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Whether or not claims 1, 3-7, 9, 11, 12-17 and 19 are patentable under 35 USC § 102(e) for being anticipated by Matthews et al. (Publication Number 2004/0139156).

B. Whether or not claims 2, 8, 10, 12, 18 and 20, are patentable under 35 USC § 103(a) over Matthews (Publication Number 2004/0139156) in view of Boies et al. (Publication Number 2002/0194011).

VII. ARGUMENTS

A. **Claims 1, 3-7, 9, 11, 12-17 and 19 have been rejected by the Examiner under 35 USC §102(e) as being anticipated by Matthews et al. (Publication Number 2004/0139156).**

Matthews disclose the following paragraph 0023.

[0023] "The present invention can also provide a method for a human user to obtain information about a product from a user computer coupleable over a computer network to an information provider organization computer having a selected human information provider, who is using the information provider computer. This method can include establishing a network connection between the user computer and the information provider computer over the computer network. The method can include sending a computer used identifier, preferably a unique computer user identifier, from the user computer to be received by the information provider computer over the network connection. The received computer user identifier can be matched to a record containing information about the computer user. A direct network collection may be established to the selected human information provider from among several human information providers as a function of the information contained in the record. The record can be displayed to the human information provider on a display coupled to the information provider computer. In some methods, the record information includes the preferred language of the user, a product previously inquired about by the user, a product knowledge level previously attained by the user, or a product knowledge area previously inquired about by the user, either individually or in any combination of these items."

Matthews computer user identifier can be matched to a record containing information about the computer user.

Information about Matthews user is found in Matthews paragraph 0190 – 0201 which reads as follows.

[0190] "Subscription-Indicates products and services the contact has the helptrainTM subscription for.

The Subscription may include any one of the following:

[0191] Subscription unit (# of minutes, # of requests, # of resolutions. . .)

[0192] Subscription length (weekly, monthly, yearly. . .)

[0193] Subscription channels (Internet, Phone, Digital TV, PDA . . .)

[0194] Subscriber Profile which may include any of the following:

[0195] Language(s) spoken

[0196] Contact information

[0197] Purchase history

[0198] Product registration

[0199] Service usage history

[0200] Customer satisfaction surveys

[0201] Payment method information (credit card, direct debit...)"

Matthews is concerned with the language the user speaks not with the physical disabilities of the user.

Applicant defines a user profile in paragraph 009, page 3 of his patent application which reads as follows.

[009] According to the method of the present invention, a person obtains live assistance in using a paper processing machine. The assistance is provided by a service bureau that is remote from the person. The service bureau receives a call for help, and checks a user profile of the person. The service bureau also checks an equipment profile of the person. Then the service bureau provides interactive assistance to the person, based at least partly upon the user profile and the equipment profile. The user profile will indicate any disabilities that the user may have, such as visual impairment, tremor in the hands, or cognitive problem. An empty user profile signifies that the person at the user end has no relevant disabilities, but even for such a person, the user profile may contain other types of information such as the level of support purchased by that person from the service bureau. In contrast, the equipment profile will typically indicate what types and models of paper processing equipment the person has available at the user end.

Matthews discloses the following in paragraph [0016].

[0016] "The present invention provides a technical solution. For enabling direct, person to person assistance over a communications network. The methods provide product and system support tools enabling, for example, a purchaser of a product or service to execute a computer program on a computer to establish an intelligently routed request for assistance to a human having knowledge in the area of the' particular product or service. In one method, a human user couples a computer readable media associated with a product to a computer, A computer program on the

computer readable media checks for, and if need be, installs needed software. 'I he program can then establish a connection over. A network such as the Internet directly to the help assistance organization appropriate for the particular product or service. The computer readable media can include an indication of the particular product or service and/or the assumed preferred language of the purchaser of the product or service. The assistance request can be routed to a human assistant, who may be seated at a computer device. In a preferred method, the human assistant greets the request for' assistance and the human user with a live, personal, updated video link carrying the assistant's voice and a video signal carrying the assistant's image to the computer of the help requester. The assistant may obtain preliminary information from the human user, and begin rapidly to provide assistance in a "fact: to face" virtual environment. Where the product involved is a computer related product, the human assistant may optionally view the same computer display as the human user and even manipulate the display to illustrate the performance of a particular software product."

Matthews discloses the following in paragraph 0112.

[0112] "After the helper has been selected and linked to, over the communication link, a helper communication object 240 may be displayed on the requester's digital device display. Helper object 240 may include a video object 242 which is updated, and an audio object 250 which projects the voice of the helper in substantially real time to the requester, for example, over the requester's headphones or speakers. FIG. 6 illustrates the audio/voice response of the helper in a box 250 for purposes of illustration. Helper object 240 may also include a screen share object 244 which, when selected, allows the remote helper to view substantially the same screen as the requester. Helper object 240 can also include a refresh button 246 to refresh the session, and a hang-up object or connect object 248 to disconnect the session. In addition to the initial greeting or salutation delivered through audio at 250, a text salutation and greeting 234 may also be included, given the helper's name or identifier 236 and also a session identifier or reference number 238."

Matthews video link carries the assistant's voice and the assistant's image to the help requests computer. Fig. 6 of Matthew's also discloses a picture of the helper 240 on screen 232 of the requester computer. Matthews does not disclose or anticipate the following steps of claim 1, namely receiving a video uplink from the person's location; and

providing interactive assistance from the remote service bureau to the person, in response to the call, and seeing a visual image from the person's location, wherein the

interactive assistance is based at least partly upon the user profile, the visual image and the equipment profile.

Matthew also does not disclose on anticipate the following from claim 11;

an operator terminal at a remote service bureau, responsive to a call for help from the user terminal and the video image of the person's location, the operator terminal having capacity to access a user profile and an equipment profile, the video image and the operator terminal also having capacity to provide interactive assistance to the user terminal based at least partly upon the user profile the video image and the equipment profile.

Matthews does not have a service bureau that receive a video image from the person's location so that the interactive assistance is based at least partly upon the user profile the visual image and the equipment profiled as claimed in claims 1 and 11 and those claims dependent thereon.

As advantage of applicant's claimed invention over Matthews is that a video image of the proper processing machine is provided to a service bureau or operator terminal to enable the service bureau or operator terminal view the person's location to help the person obtain assistance

Thus the service bureau is able to modify their assistance by having knowledge of the user physical condition as well as seeing how that physical condition impedes the user in following the service bureau instructions.

B. Claims 2, 8, 10, 12, 18 and 20 have been rejected by the Examiner under 35 U.S.C. § 103(a) Matthews (Publication Number 2004/0139156) in view of Boies et al. (Publication Number 2002/0194011).

In addition to the argument made in above Section A please consider the following.

Claims 2 and 12

Claim 2 depends on claim 1 and claim 12 depends on claim 11.

Claims 2 and 12 respectively add the following limitation to their independent claim: wherein the interactive assistance is necessarily customized in response to an

indication in the user profile of at least one user disability, and wherein the equipment profile comprises information about at least the paper processing machine.

The Examiner stated the following on pages 8 and 9 of the Final Rejection.

"Matthews et al does not specifically mention the user profile contains at least one user disability. Boies et al teaches user profile containing at least one user disability (see e.g. para [0010], i.e. a user profile is used to identify a limitation, which corresponds to the disability of an individual, and the preferred content format to use with the individual and the preferred content format to use with the individual.. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the interactive assistance customized in response to an indication in the user profile and the equipment profile comprising information about the paper processing machine of Matthews et al. with the user profile, containing at least one user disability of Boies et al. because the user profile identifying at least one user disability also includes the preferred information content format to use with the individual (see e.g. par [0010], i.e., the user profile containing a disability of visual impairment will cause the format to enhance the audio information)."

[0010] ."The mechanism may itself inform an information source of the limitations of the individual or the mechanism may be used in conjunction with a user profile to identify the limitations of the individual and the preferred information content format to use with the individual."

Matthews and/or Boies takes separately or together do not disclose or anticipate an interactive assistance that is customized in response to an indication in the user profile of at least one user disability, wherein the equipment profile comprises information about at least the paper processing machine.

Notwithstanding the foregoing, in rejecting a claim under 35 U.S.C. §103, the Examiner is charged with the initial burden for providing a factual basis to support the obviousness conclusion. *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967); *in re Lunsford*, 375 F.2d 385, 148 USPQ 721 (CCPA 1966); *in re Freed*, 425 F.2d 785, 165 USPQ 570 (CCPA 1970). The Examiner is also required to explain how and why one having ordinary skill in the art would have been led to modify an applied reference and/or combine applied references to arrive at the claimed invention. *In re*